

In re:      Application of Chem-Nuclear Systems,      )  
                  LLC, an EnergySolutions company, for      )  
                  Adjustment in the Levels of Allowable      )  
                  Costs and for Identification of Allowable      )  
                  Costs      )  
                  )

**APPLICATION**  
 ( for Fiscal Year 2021-2022 )

1. On June 6, 2000, the Governor of the State of South Carolina signed the Atlantic Interstate Low-Level Radioactive Waste Compact Implementation Act (the “Act”). The Act is codified as S.C. Code Ann. §§ 48-46-10, *et seq.* (2008 & Supp. 2018), as amended.

2. Section 48-46-40(B)(1)(Supp. 2018) of the Act authorizes and directs the Commission “to identify allowable costs for operating a regional low-level radioactive waste disposal facility in South Carolina.” Section 48-46-30(1) (Supp. 2018) defines “allowable costs” as “costs to a disposal site operator of operating a regional disposal facility.” Under that definition, such costs “are limited to costs determined by standard accounting practices and regulatory findings to be associated with facility operations.”

3. Section 48-46-40(B)(3)(Supp. 2018) of the Act provides that “allowable costs” expressly include the costs of certain specifically identified activities necessary in the operation of a low-level radioactive waste disposal facility. That Section also provides that “allowable costs” include “any other costs directly associated with disposal operations determined by [the Commission] to be allowable.”

4. Chem-Nuclear operates a regional low-level radioactive waste disposal facility in Barnwell County, South Carolina (the “Facility”). Consequently, the Commission has the authority to identify the “allowable costs” for the Company’s operation of the Facility.

5. The Facility is located on a tract of land consisting of approximately 235 acres which the State of South Carolina owns and which the Company leases from the South Carolina Department of Administration. The 235-acre site includes areas for various operations, including completed disposal trenches, potential trench areas, ancillary facilities, water management areas and buffer zone areas.

6. The Company conducts its operations at the Facility under South Carolina Radioactive Material License 097 (“License 097”) by which the South Carolina Department of Health and Environmental Control (“DHEC”) has authorized receipt, storage and disposal of low-level radioactive waste at the Facility. License 097 contains numerous technical conditions and specifications for management of waste at the Facility. In addition to the requirements of License 097, the Facility is subject to DHEC’s regulations in 24A S.C. Code Reg. 61-63 (Rev. 2008). DHEC’s regulations are compatible with the provisions of “Licensing Requirements for Land Disposal of Radioactive Wastes,” which the United States Nuclear Regulatory Commission (“NRC”) originally promulgated in 10 C.F.R. Part 61, and DHEC has adopted most of those provisions and enforces them through its own regulations under an agreement with the NRC.

7. On June 9, 2021, the Commission issued its Order No. 2021-412 in Docket No. 2020-13-A. In that Order, the Commission identified certain categories of “allowable costs” and identified levels of “allowable costs” within those categories. Order No. 2021-412 approved certain rates for variable allowable costs and identified the sum of \$3,078,522 for total fixed allowable costs for the 12 months ending June 30, 2021. The Order also approved irregular costs of \$577,277 as allowable costs.

8. S.C. Code Ann. § 48-46-40(B)(4) Supp. 2018)) provides that an operator of a low-level radioactive waste disposal site may apply for adjustments in the levels of “allowable costs” that the Commission has identified for the previous fiscal year and for identification of costs that the Commission has not previously identified as “allowable costs.” Upon approval of such application, Section 48-46-40(B)(4) requires the Commission to authorize the site operator to adjust its “allowable costs” for the current fiscal year to compensate the site operator for revenues lost during the previous fiscal year.

9. For the purposes of this Application and its Exhibits, the Company has used the cost categories that the Commission approved in Order No. 2004-349 in Docket No. 2000-366-A, which were based on the recommendations of the parties to the Collaborative Review of the Company’s Operations and Efficiency Plan (“OEP”).

10. During the Company’s recently concluded Fiscal Year 2020-2021 (*i.e.*, the twelve months ending June 30, 2021), the Company’s actual “allowable costs” in those categories that the Commission identified in Order No. 2021-412 for fixed costs were \$2,983,303, which were \$95,219 less than the amount of \$3,078,522 identified in Commission Order No. 2021-412. Therefore, the Company proposes no adjustment for allowable fixed costs in this Application.

11. With respect to the allowable costs that Order No. 2021-412 characterized as variable labor and non-labor costs, which are dependent upon volumes of waste buried, the Company incurred actual costs in the category of variable labor and non-labor costs in Fiscal Year 2020-

2021 of \$127,538.15, which is \$10,210.22 more than the total calculated costs of \$117,327.93 identified in Order No. 2021-412. The calculated costs are derived by multiplying the variable cost rates identified by the Commission in that Order for categories of waste by the number of units in each category. The Company proposes an adjustment of \$10,210.22 for variable labor and non-labor costs in this Application.

12. With respect to vault costs, Order No. 2021-412 established certain variable cost rates for each type of waste disposed at the Facility. By applying those rates to the volumes of each type of waste received in Fiscal Year 2020-2021, the Company calculated a total cost for routine disposal vaults of \$420,359.83. The actual incurred total cost for routine disposal vaults was \$370,741.32, which is \$49,618.51 less than the calculated costs. Therefore, the Company proposes no adjustment in this category of costs.

13. With respect to those allowable costs which Order No. 2021-412 characterized as irregular costs, the Company incurred total irregular costs for Fiscal Year 2020-2021 of \$597,469. Total irregular costs incurred in Fiscal Year 2020-2021 are \$20,192 more than the costs identified in Order No. 2020-412 of \$577,277. Therefore, the Company requests an adjustment of \$20,192 for irregular costs in this Application.

14. The Company has attached to this Application three (3) exhibits pertaining to the adjustments and identification of the categories of “allowable costs” for its disposal operations.

15. **Exhibit A** to this Application describes in detail the Company’s proposed adjustments for the recovery of its actually incurred costs for fixed, variable and irregular costs to reflect the differences between the level of “allowable costs” identified in Order No. 2021-412 and the level of the Company’s actually incurred costs in Fiscal Year 2020-2021. Exhibit A also provides the rates for variable costs which were contained in Order No. 2021-412.

16. **Exhibit B** describes the actual irregular costs which the Company incurred in Fiscal

Year 2020-2021, organized by project number.

17. **Exhibit C** depicts the total fixed costs, irregular costs and variable cost rates that the Company proposes for identification and approval for Fiscal Year 2021-2022.

18. For Fiscal Year 2021-2022, the Company requests identification as “allowable costs” a total of \$3,207,886 as allowable fixed costs, as depicted in Exhibit C. Exhibit C also identifies variable material cost rates and variable waste dependent labor and non-labor rates for Fiscal Year 2021-2022. Irregular costs for Fiscal Year 2021-2022 anticipated at the time of this Application are \$425,493 as specified in Exhibit C. The irregular costs will be discussed in detail in pre-filed testimony. The costs and amounts in Exhibits A and C are consistent with the description of “allowable costs” in Section 48-46-40(B)(3)(Supp. 2018), and they have been determined by standard accounting practices and are consistent with the recommendations of the Collaborative Review of the OEP as the Commission approved in Order No. 2004-349 in Docket No. 2000-366-A.

WHEREFORE, Chem-Nuclear Systems, LLC, an *EnergySolutions* company, respectfully prays unto this honorable Commission:

1. To review the Company’s Application and issue its Order, under S.C. Code Ann. § 48-46-40(B)(4) (Supp. 2008), recognizing the levels of “allowable costs” as depicted in Exhibit A for Fiscal Year 2020-2021, and identifying the levels of irregular costs in Exhibit B for Fiscal Year 2020-2021, and identifying as “allowable costs” those costs depicted in Exhibit C for Fiscal Year 2021-2022.

2. For such other and further relief as is just and proper.

Respectfully submitted,

s/ J. David Black

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Columbia, South Carolina

**EXHIBIT A:**  
**FISCAL YEAR 2020-2021**  
**FIXED COSTS**  
**NO ADJUSTMENT PROPOSED**

Fixed costs, subject to a 29% operating margin, were incurred in fiscal year 2020-2021 in the general categories of labor-related costs, non-labor costs, costs allocated from corporate functions, equipment leases and support, depreciation and insurance. The following table compares the actual costs incurred to the costs identified as allowable in Commission Order No. 2021-412:

	<b>Commission Order No. 2021-412</b>	<b>Actual Costs Incurred in FY 2020-21</b>	<b>Adjustment Proposed</b>
Labor, Fringe and Non-labor	\$2,007,435	\$2,004,140	
Depreciation	\$124,693	\$124,693	
Insurance	\$289,729	\$245,733	
Equipment leases and support	\$80,665	\$115,717	
Corporate Allocation (G&A)	\$576,000	\$493,020	
<b>Subtotal (Fixed Cost subject to 29% margin)</b>	<b>\$3,078,522</b>	<b>\$2,983,303</b>	
Legal Support	\$0		
<b>Subtotal (Fixed Cost not subject to 29% margin)</b>	<b>\$0</b>	<b>\$0</b>	
<b>Total Fixed Costs</b>	<b>\$3,078,522</b>	<b>\$2,983,303</b>	<b>-</b>

The actual Fixed Costs incurred during fiscal year 2020-2021 were **\$2,983,303**. This amount is **\$95,219 less** than the amount identified in Commission Order Number 2021-412; therefore, **no adjustment is proposed** in this category of costs.

**FISCAL YEAR 2020-2021****VARIABLE COSTS****Variable Labor and Non-Labor Costs****ADJUSTMENT PROPOSED**

Commission Order No. 2021-412 identified the following categories of rates for projecting Variable Labor and Non-Labor costs: vault purchase and inspection (per vault), ABC waste disposal (per shipment), slit trench operations (per slit trench offload), customer assistance (per shipment), and trench records (per container).

The following table illustrates the Variable Labor and Non-Labor costs that would be calculated using the Variable Labor and Non-Labor rates identified in Commission Order No. 2021-412 and the FY 2020-2021 number of units in each category.

	<b>Units</b>	<b>Variable Cost Rate in Commission Order No. 2021-412</b>	<b>Calculated Cost</b>
Vault Purchase & Inspection (per vault)	59	\$184.76	\$10,900.84
ABC Waste Disposal (per shipment) *total shipments, less slit trench shipments, less irregular project shipments	51	\$1,566.33	\$79,882.83
Slit Trench Operations (per slit trench offload)	0	\$44,844.35	\$0.00
Customer Assistance (per shipment)	51	\$136.80	\$6,976.80
Trench records (per container)	58	\$337.37	\$19,567.46
<b>Total Calculated Variable Labor and Non-labor Cost</b>			<b>\$117,327.93</b>

The actual Variable Labor and Non-Labor costs incurred in fiscal year 2020-2021 were **\$127,538.15**. This amount is **\$10,210.22** more than the amount that would have been anticipated based on rates provided in Commission Order 2021-412; therefore, **an adjustment of \$10,210.22 is proposed** in this category of costs.



**FISCAL YEAR 2020-2021****VARIABLE COSTS****Vault Costs****NO ADJUSTMENT PROPOSED**

The following table illustrates the Vault Costs that would be calculated using the Variable Cost rates identified in Commission Order No. 2021-412 and the actual FY 2020-2021 volumes of waste received in each respective category.

	<b>Volume Received ft<sup>3</sup></b>	<b>Variable Cost Rate in Order No. 2020-441</b>	<b>Calculated Cost</b>
Class A waste	7,624.70	\$43.82	\$334,114.35
Class B waste	1,203.00	\$54.94	\$66,092.82
Class C waste	360.90	\$55.84	\$20,152.66
Slit Trench waste	0.00	\$188.57	\$0.00
Irregular Components (in vaults as an irregular cost)	0.00	N/A	N/A
Irregular Components (not in vaults)	13,947.30	N/A	N/A
<b>Total Calculated Vault Cost</b>			<b>\$420,359.83</b>
<b>Total Volume (cubic feet)</b>	<b>23,135.90</b>		

The actual Vault cost incurred during fiscal year 2020-2021 was **\$370,741.32**. This amount is **\$49,618.51** less than the amount that would have been anticipated based on rates provided in Commission Order 2021-412 therefore, **no adjustment is proposed** in this category of costs.

**FISCAL YEAR 2020-2021****IRREGULAR COSTS****ADJUSTMENT PROPOSED**

The following table summarizes the Irregular Costs incurred in fiscal year 2020-2021 organized by projects. Exhibit B provides additional descriptions of each of these irregular projects.

<b>Irregular Cost Item</b>	<b>Order No. 2021-412</b>	<b>Actual FY '20-'21 Labor</b>	<b>Actual FY '20-'21 Non-Labor</b>	<b>Total Cost FY '20-'21</b>
Trench Characterization & Construction	\$57,624	\$27,276	\$50,470	\$77,746
Large Component Disposal	\$500,000	\$61,025	\$435,090	\$496,115
Site Eng & Drawing Updates	\$141	\$141	\$0	\$141
Site Maintenance		\$1,187	\$0	\$1,187
Storm Damage Repairs & Cleanup	\$51	\$51	\$0	\$51
Equipment Repairs	\$19,153	\$153	\$21,508	\$21,661
Trench Records Software	\$308	\$568	\$0	\$568
<b>Total Irregular Costs</b>	<b>\$577,277</b>	<b>\$90,401</b>	<b>\$507,068</b>	<b>\$597,469</b>

The actual Irregular Costs incurred in fiscal year 2020-2021 was **\$597,469.45**. This amount is **\$20,192** more than the amount identified in Commission Order No. 2021-412; therefore, **an adjustment of \$20,192 is proposed** in this category of costs.

**EXHIBIT B:**  
**FISCAL YEAR 2020-2021**  
**IRREGULAR COSTS**  
**ORGANIZED BY PROJECT**

<b>PROJECT NUMBERS</b>	<b>PROJECT NAME AND EXPLANATIONS</b>
<b>188701.8029</b> <b>188701.8031</b> <b>188701.8032</b>	<b>Trench Characterization &amp; Construction</b> <b>(Labor \$27,276 and Non-Labor \$50,470)</b>  Trench construction activities in FY 2020-2021 including design, construction and backfill in Trenches 99, 100 and Slit Trench 38.
<b>188007.8001</b> <b>188007.8002</b> <b>188701.8033</b>	<b>Large Component Disposal</b> <b>(Labor \$61,025 and \$435,090)</b>  Cost related to disposal of large components including design and construction of Trench 101 for large component disposal.
<b>188004.8001</b>	<b>Site Eng &amp; Drawing Updates</b> <b>(Labor \$141)</b>  Labor charged to this project in error. The expenses will be reclassified to the correct project in FY 2020-2021.
<b>188004.8002</b>	<b>Site Maintenance</b> <b>(Labor \$1,187)</b>  Site maintenance costs.
<b>188004.8003</b>	<b>Storm Damage Repairs &amp; Cleanup</b> <b>(Labor \$51)</b>  Fringe true-up charged to this project in error. The expenses will be reclassified to the correct project in FY 2021-2022.
<b>188004.8005</b>	<b>Equip Repairs &amp; Maint</b> <b>(Labor \$153 and Non-Labor \$21,508)</b>  Site maintenance costs.
<b>188000.8013</b>	<b>Trench Records Software</b> <b>(Labor \$568)</b>  Cost to provide the maintenance and support for the trench records database and reporting software.

**EXHIBIT C:****PROPOSED FISCAL YEAR 2021-2022 COSTS**

We propose the following amounts be identified as allowable costs for fiscal year 2021-2022:

<b>FIXED COSTS</b>	
<b>Fixed Costs to which 29% operating margin is added</b>	
Labor, Fringe and Non-Labor	\$2,204,244
Depreciation	\$127,810
Insurance	\$251,876
Equipment Leases and Support	\$118,610
Corporate Allocations (SG&A, IT)	\$505,346
<b>Fixed Costs to which 29% operating margin is not added</b>	
Legal Support	\$0
<b>Total Fixed Costs</b>	<b>\$3,207,886</b>
<b>IRREGULAR COSTS</b>	
Trench Characterization & Construction	\$287,127
Large Component Disposal	\$8,292
Irradiated Hardware Trench	\$50,000
Site Maintenance	\$40,000
Trench Records Software	\$74
Storm Damage Repairs & Cleanup	\$0
Site Eng & Drawing Updates	\$0
Equipment Repairs & Site Maintenance	\$40,000
<b>Total Irregular Costs</b>	<b>\$425,493</b>
<b>VARIABLE COSTS</b>	
<b>Variable Labor and Non-Labor Rates</b>	
Vault Purchase and Inspection (per vault)	\$203.58
ABC Waste Disposal (per shipment)	\$1,751.48
Slit Trench Operations (per slit trench offload)	\$44,844.35
Customer Assistance (per shipment)	\$162.03
Trench Records (per container)	\$364.24
<b>Variable Material Cost Rates (Vaults)</b>	
Class A Waste (per cubic foot)	\$38.76
Class B Waste (per cubic foot)	\$55.84
Class C Waste (per cubic foot)	\$55.84
Slit Trench Waste (per cubic foot)	\$188.57